FILE 'HOME' ENTERED AT 09:28:45 ON 06 JUN 2005

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$$\begin{array}{c} G_1 \\ & & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & \\ & &$$

11 18 19 27 28 30 32 33 34 35 36 37 40 41 ring nodes : 1 2 3 4 5 6 7 8 9 10 12 13 14 15 16 17 20 21 22 23 24 25 chain bonds : 1-41 3-40 8-11 11-12 13-30 15-18 17-33 18-19 19-20 21-27 23-28 24-32 34-35 34-36 36-37 ring bonds : 1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 12-13 12-17 13-14 14-15 15-16 16-17 20-21 20-25 21-22 22-23 23-24 24-25 exact/norm bonds : 1-41 3-40 8-11 11-12 15-18 18-19 19-20 21-27 23-28 24-32 34-35 34-36 36-37 exact bonds : 13-30 17-33 normalized bonds : 1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 12-13 12-17 13-14 14-15 15-16 16-17 20-21 20-25 21-22 22-23 23-24 24-25 isolated ring systems : containing 1 : 12 : 20 :

G1:CF3,X

G2:H,CH3,Ak

chain nodes :

G3:H,CH3,CO2H,COOH,Ak,[\*1]

### Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:CLASS 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:CLASS 19:CLASS 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom 25:Atom 27:CLASS 28:CLASS 30:CLASS 32:CLASS 33:CLASS 34:CLASS 35:CLASS 36:CLASS 37:CLASS 40:CLASS 41:CLASS

## L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

=> s l1 full

L3 12 SEA SSS FUL L1

=> file ca

=> s 13

L4 4 L3

=> d ibib abs hitstr 1-4

### 10/719,997

L4 ANSWER 1 OF 4 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:
142:392304 CA Preparation of salts and polymorphs of quinoline derivative, useful as a potent antidiabetic compounds
KRUK, Henry T., McGee, Lewrence R., Yang, Bing
Angan, USA
POCUMENT TYPE:
DOCUMENT TYPE:
PARENT INFORMATION:
English
PATIENT INFORMATION:
1 DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: APPLICATION NO. DATE

A2 20050414 WO 2004-US32552 20041004
AL, BM, MT, AU, AY, BA, BB, BG, BR, BV, BV, BZ, CA, CH, CR, QU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GG, GH, BR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LS, LL LU, V, MA, HD, HG, HK, HN, MY, HX, KZ, NA, NI, OH, PG, FH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TM, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, GK, KZ, HD, RU, TJ, TH, AT, BE, BG, CH, CY, CZ, DE, DK, FI, FR, GB, GR, HU, IB, IT, LU, MC, ML, PL, PT, RO, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, TG

10 US 2003-5084200 PATENT NO.

WO 2005033074

W: AB, AG, A
CN, CO, C
GE, GH, GI
NO, NZ, OI
TJ, TM, TI
RW: EW, GH, GI
AZ, BY, KX
EE, ES, FI
SI, SK, FF
SN, TD, TC
PRIORITY APPLN. INFO.:
GI PATENT NO. APPLICATION NO. US 2003-508470P

The invention relates to a preparation of salts and polymorphs of quinoline derivative I, useful in the treatment of PPARy-mediated conditions. In particular, the invention provides salts and polymorphs of a compound which modulates the expression and/or function of a peroxisome proliferator-activated receptor. Quinoline derivative I (PPARy ligand binding assay, IC50 < 1 µH) was prepared via amidation of 2,4-dichlorobeazenesulfonyl chloride by 3,5-dichloro-4-(3,4-dihydroquinolin-3-yloxy)phenylamine. The salts and polymorphs are useful for the treatment or prevention of conditions and disorders associated with energy homeostasis such as type II diabetes, lipid metabolism, adipocyte differentiation and inflammation.

315224-26-1P 849738-77-8P 849738-78-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU

ANSWER 1 OF 4 CA COPYRIGHT 2005 ACS on STN CMF C6 H6 O3 S

ANSWER 1 OF 4 CA COPYRIGHT 2005 ACS on STN (Continued) (Therapeutic use), BIOL (Biological study), PREP (Preparation), USES (Uses) (Uses)
{prepn. of salts and polymorphs of quinoline deriv. useful as a potent antidiabetic compds.)
315224-26-1 CA
Benzenesulfonamide, 2,4-dichloro-N-[3,5-dichloro-4-(3-quinolinyloxy)phenyl)- (9CI) (CA INDEX NAME)

849738-77-8 CA
Benzenesulfonamide, 2,4-dichloro-N-[3,5-dichloro-4-(3-quinolinyloxy)phenyl]-, monchydrochloride (9CI) (CA INDEX NAME)

• HC1

849738-78-9 CA
Benzenesulfonamide, 2,4-dichloro-N-[3,5-dichloro-4-(3-quinolinyloxy)phenyl]-, monobenzenesulfonate (9CI) (CA INDEX NAME)

CRN 315224-26-1 CMF C21 H12 C14 N2 O3 S

CM 2

CRN 98-11-3

```
L4 ANSWER 2 OF 4 CA COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:
136:59820 CA
Preparation of quinolinyl and benzothiazolyl
PPAR-gamma modulators
Hogee, Lawrence R.; Houze, Jonathan B.; Rubenstein,
Steven N.; Hagiware, Atsushi; Furukawa, Noboru;
Shinkai, Hisashi
Tulerik Inc., USA; Japan Tobacco, Inc.
POCUMENT TYPE:
DOCUMENT TYPE:
DOCUMENT TYPE:
LANGUAGE:
PAMILY ACC. NUM. COUNT:
PAMILY ACC. NUM. COUNT:
PAMILY ACC. NUM. COUNT:
  DOCUMENT TYPE:
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
```

MARPAT 136:69820

OTHER SOURCE(S):

#### L4 ANSWER 2 OF 4 CA COPYRIGHT 2005 ACS on STN (Continued)

$$Ar^{1} \times \begin{array}{c} R^{3} & R^{1} \\ Y-R^{2} & I \end{array}$$

AB The title compds. [I; Arl = (un)substituted 2-benzothiazolyl or quinolinyl; X = 0, CO, CER10, NR11, S(0)k; Y = NR12502; R1 = H, halo, alkyl, etc.; R2 = (un)substituted aryl; R3 = halo, alkoxy; R10 = H, CM, alkyl; R11 = H, alkyl; R12 = H, alkyl; R1 = H, alkyl; R12 = H, alkyl; R1 = H, alkyl; R12 = H, alkyl; R1 = N = NR12502; useful in the treatment or prevention of a condition or disorder mediated by PPARY such as diabetes, obesity, bypercholesterolemia, rheumatoid arthritis and atherosclerosis, were prepared Thus, reacting 3,5-dichloro-4-(quinolin-3-ylsulfanyl)anlline (preparation given) with 2-chlorobenzenesulfonyl chloride in
the presence of pyridine and catalytic amount of DMAP in THF/CH2C12 afforded 78% II which showed ICSO of < 1 µM against PPARY ligand binding.
The PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); RMI (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagant); USES (Uses) (preparation); RACT (Reactant or reagant); USES (Uses)
(Preparation); RACT (Reactant or reagant); USES (Uses)
(Preparation of quinolinyl and benzothiazolyl PPAR-gamma modulators)
RN 31524-20-3 CA (Gamma Call); All (CA INDEX NAME)

H

rn Cn G-Quinolinecarboxylic acid, 3-[2,6-dichloro-4-[[(2,4-dichlorophenyl)sulfonyl]amino]phenoxy]- (9CI) (CA INDEX NAME)

315224-31-8 CA
8-Quinolinecarboxylic acid, 3-{2,6-dichloro-4-{{(2,4-dichlorophenyl)sulfonyl}amino]phenoxy]- (9CI) (CA INDEX NAME)

315224-33-0 CA
Benzenesulfonamide, 2,4-dichloro-N-[3,5-dichloro-4-[(6-methyl-3-quinolinyl)oxy]phenyl]-5-methyl- (9CI) (CA INDEX NAME)

315224-34-1 CA
Benzenesulfonamide, 2,4-dichloro-N-[3-chloro-5-fluoro-4-(3-quinolinyloxy)phenyl]-5-methyl- (9CI) (CA INDEX NAME)

315226-32-5 CA
Benzenesulfonamide, 2,4-dichloro-N-[3,5-dichloro-4-(3-quinolinyloxy)phenyl}-5-methyl- (9CI) (CA INDEX NAME)

L4 ANSWER 2 OF 4 CA COPYRIGHT 2005 ACS on STN (Continued)

$$\underset{\text{HO}_2\mathcal{C}}{\underbrace{\hspace{1cm}}} \overset{\text{N}}{\underset{\text{cl}}{\hspace{1cm}}} \overset{\text{cl}}{\underset{\text{cl}}{\hspace{1cm}}} \overset{\text{n}}{\underset{\text{cl}}{\hspace{1cm}}} \overset{\text{cl}}{\underset{\text{cl}}{\hspace{1cm}}}$$

IT

315224-24-9P 315224-25-0P 315224-26-1P 315224-39-4P 315224-31-0P 315224-33-0P 315224-34-1P 315226-32-5P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of quinolinyl and benzothiazolyl PPAR-gamma modulators) 315224-24-9 CA Benzenesulfonamide, 4-chloro-N-[3,5-dichloro-4-(3-quinolinyloxy)phenyl]-2-(trifluoromethyl)- (9CI) (CA INDEX NAME)

315224-25-0 CA
Benzenesulfonamide, 2-chloro-N-(3,5-dichloro-4-(3-quinolinyloxy)phenyl]-4(trifluoromethyl)- (9CI) (CA INDEX NAME)

315224-26-1 CA
Benzenesulfonamide, 2,4-dichloro-N-[3,5-dichloro-4-(3-quinolinyloxy)phenyl]- (9CI) (CA INDEX NAME)

ANSWER 2 OF 4 CA COPYRIGHT 2005 ACS on STN (Continued)

REFERENCE COUNT:

2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

### 10/719,997

COPYRIGHT 2005 ACS on STN
135:352829 CA
Combination therapeutic compositions containing
benzess compounds
Jaen, Juan C.; Chen, Jin-Long
Tularik linc., USA
PCT Int. Appl., 57 pp.
CODEN: PIXXIZ
Patent
English
2 L4 ANSWER 3 OF 4 CA ACCESSION NUMBER: TITLE: INVENTOR(S): PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. APPLICATION NO. DATE WO 2001082916 A2 J9011108
W: AE, AG, AL, AM, AT, AU, AZ,
CR, CU, CZ, DE, DK, DM, DZ
HU, ID, IL, IN, 1s, JP, KZ,
LU, LV, MA, MD, AG, MK, AN,
SD, SE, SG, SI, SK, SL, TJ,
YU, ZA, ZW, AM, AZ, BPT, KG,
RW: GH, GH, KE, LS, NW, MZ, SD,
DE, DK, ES, FI, FR, GB, GR,
US 2002037928 A1 20020328
US 200425991 A1 200201223
RITY APPLIN INFO: WO 2001-US14393 20010502 PA, BB, BG, BR, BY, BZ, CA, CH, CN, EE, ES, FI, GB, GD, GE, GH, GM, HR, KG, KP, KR, KZ, LC, LK, LR, LS, LT, MY, MX, MZ, NQ, NZ, PL, FT, RO, EU, TM, TR, TT, TZ, UA, UG, US, UZ, VN, KZ, MD, RU, TJ, TM SL, SZ, TZ, UG, ZY, AT, BE, CH, CY, IE, IT, LU, MC, NL, PT, SE, TR, BF, GY, ML, MR, NE, SN, TD, TG US 2001-847887 US 6653332 US 2004259918 PRIORITY APPLN. INFO.: US 2003-456932 20030605 US 2000-201613P US 2001-847887 OTHER SOURCE(S): MARPAT 135:352829

The present invention provides pharmaceutical compns. and methods for the treatment of diabetes mellitus using combination therapy. The compns. relate to a benzene compound and an antidiabetic agent such as sulfonylureas, biguanides, glitzones, e-glucosidase inhibitors, potassium channel antagonists, aldose reductase inhibitors, glucagon antagonists, activators of RNR, insulin therapy or other anti-obesity agent. The methods include the administration of the combination of benzene compound with antidiabetic agent where the two components are delivered in a simultaneous manner, where the benzene compound is administrated first, followed by the antidiabetic agent as well as wherein the antidiabetic agent is delivered first followed by the benzene compound for example, the benzene compound (1) was synthesized using a 5-amino-2-(3-chloro-5-pyridyloxy)benzonitrile (0.457 g) in methylene AB

COPYRIGHT 2005 ACS on STN
134:71498 CA
Preparation of heterocyclyl substituted
benzenesulfonamides and pyridinesulfonamides for the
modulation of PPARP activity
MCGee, Lawrence R.; Houze, Jonathan B.; Rubenstein,
Steven M.; Hagiware, Atsushi: Furukawa, Noboru;
Shinkai, Hisashi
Tularik Inc., USA; Japan Tobacco Inc.
PCT Int. Appl., 232 pp.
CODEN: PIXXD2
Patent
English
2 L4 ANSWER 4 OF 4 CA ACCESSION NUMBER: TITLE: INVENTOR (S): PATENT ASSIGNEE(S): SOURCE: DATE APPLICATION NO. US 2004-810325 US 1999-141672P US 2000-201613P US 2000-606433 WO 2000-US18178 US 2002-209205 20040325 P 19990630 P 20000503 A1 20000628 W 20000628 A1 20020730 OTHER SOURCE(S): MARPAT 134:71498

$$\bigcap_{Ar^1 \times Y - R^2 \ I}^{R^3 \ R^1} \bigcap_{N \longrightarrow 0}^{C1} \bigcap_{CN}^{H} \widehat{\delta}_2$$

ANSWER 3 OF 4 CA COPYRIGHT 2005 ACS on STN (Continued) chloride to which was added 2,4-dichlorobenzenesulfonyl chloride (0.456 g), followed by pyridine (150 µL). The reaction progress was monitored by TLC, and upon completion the solvent was removed under vacuum. The resulting residue was partitioned between methylene chloride and water. The org. layer was drawn off and concd. The residue was triturated with ether to provide 0.447 g of I as a white solid, n.p. 154-156\*.

315224-26-1P
RL: RAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SFN (Synthetic preparation); TRU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(benzene compds. in combination therapy for diabetes and diabetes-related disorders)
315224-26-1 CA
Benzenesulfonsmide, 2,4-dichloro-N-[3,5-dichloro-4-(3-quinolinyloxy)phenyl]- (SCI) (CA INDEX NAME)

ANSWER 4 OF 4 CA COPYRIGHT 2005 ACS on STN (Continued)
The title compds. [I, Arl = (un) substituted aryl, X = alkylene, O, alkylenoxy, atc.; Y = alkylene, O, CO, etc.; Ri = H, heteroalkyl, aryl, halo, etc.; R2 = (un) substituted aryl; R3 = halo, CN, NO2, alkoxy) which are modulators of PFARY activity and therefore are useful for the treatment of conditions such as type II diabetes and obesity, Were prepared E.g., a multi-step synthesis of the benzenesulfonamide II which showed IC50 of < 1 µM against PFARY binding, was given.

315224-28-39 315224-23-07-P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); TRU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or respent); USES (Uses)
(preparation of heterocyclyl substituted benzenesulfonamides and pyridinesulfonamides for the modulation of PPARY activity)
315224-28-3 CA
6-Quinolinecarboxylic acid, 3-[2,6-dichloro-4-[[(2,4-dichlorophenyl)sulfonyl]amino)phenoxy]-, methyl ester (SCI) (CA INDEX NAME)

315224-30-7 CA 6-Quinolinecarboxylic acid, 3-[2,6-dichloro-4-[[(2,4-dichlorophenyl)sulfonyl]amino]phenoxyl- (9CI) (CA INDEX NAME)

315224-24-9P 315224-25-0P 315224-26-1P
315224-39-4P 315224-31-8P 315224-33-0P
315224-34-1P 315226-32-5P
RL: RAC (Biological sctivity or effector, except adverse); BSU (Biological study, unclassified); SFN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Freparation); USES (Uses) (preparation of heterocyclyl substituted benzenesulfonamides and pyridinesulfonamides for the modulation of PPARy activity)
315224-24-9 CA

31524-24-9 CA
Benneseulfonamide, 4-chloro-N-[3,5-dichloro-4-[3-quinolinyloxy]phenyl]-2(trifluoromethyl)- (9CI) (CA INDEX NAME)

# 10/719,997

L4 ANSWER 4 OF 4 CA COPYRIGHT 2005 ACS on STN (Continued)

RN 315224-25-0 CA
CN Benzenesulfonamide, 2-chloro-N-[3,5-dichloro-4-(3-quinolinyloxy)phenyl]-4(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 315224-26-1 CA
CN Benzenesulfonamide, 2,4-dichloro-N-[3,5-dichloro-4-(3-quinolinyloxy)phenyl]- (9CI) (CA INDEX NAME)

RN 315224-29-4 CA
CN 8-Quinolinecarboxylic acid, 3-[2,6-dichloro-4-[[2,4-dichlorophenyl]sulfonyl]amino)phenoxy]-, methyl ester (9CI) (CA INDEX NAME)

RN 315224-31-8 CA
CN 8-Quinolinecarboxylic acid, 3-[2,6-dichloro-4-[[(2,4-dichlorophanyl)sulfonyl)amino]phenoxyl- (9C1) (CA INDEX NAME)

L4 ANSWER 4 OF 4 CA COPYRIGHT 2005 ACS on STN (Continued)

$$\begin{array}{c|c} cc_2H & c_1 \\ \hline \\ c_1 & c_1 \\ \hline \\ c_1 & c_1 \\ \end{array}$$

RN 315224-33-0 CA
CN Benzenesulfonamide, 2,4-dichloro-N-[3,5-dichloro-4-[(6-methyl-3-quinolinyl)oxy]phenyl]-5-methyl- (9CI) (CA INDEX NAME)

RN 315224-34-1 CA
CN Benzenesulfonamide, 2,4-dichloro-N-[3-chloro-5-fluoro-4-(3-quinolinyloxy)phenyl]-5-methyl- (9CI) (CA INDEX NAME)

RN 315226-32-5 CA
CN Benzenesulfonamide, 2,4-dichloro-N-[3,5-dichloro-4-(3-quinolinyloxy)phenyl]-5-methyl- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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10/719,997
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=> file marpat

=> s 11 full

L5 4 SEA SSS FUL L1

=> d ibib abs fqhit 1-4

- CF3 claim 1

```
L5 ANSWER 1 OF 4 MARPAT COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 140:105269 MARPAT

IIILE: 11-5 formation-inhibiting anilines, cytokine formation inhibitors, and pharmaceuticals containing them Kato, Fuminori; Kimura, Hirohiko; Yuki, Shunji; Yamamoto, Kazuhiro; Sano, Hitsuo; Okada, Takashi

PATENT ASSIGNEE(S): 1shihara Sangyo Kaisha, Ltd., Japan

DOCUMENT TYPE: COUEN: JKXXAP

DOCUMENT TYPE: Patent

Japanese

FAMILY ACC. NUM. COUNT: /1

Japanese

PATENT INFORMATION:
     DOCUMENT TYPE:
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
   PATENT NO. KIND DATE

JP 2004018465 A2 20040122 JP 2002-176258 20020617

PRIORITY APPLN. INFO:
AB Aniline deriva., queful for previntion and treatment of allergic diseases, chronic inflammations, systemic autoimmuse diseases, etc., are claimed.
4-Aninophenol (220 mg) was thefrified with 400 mg 2-chloro-3,5-bis(trifluoromethyl) pyridine and amidated by 220 mg 2-chloro-5-nitrobenzyl chloride to give 220 mg N-[4-[3,5-bis(trifluoromethyl)-2-pyridyloxy]phenyl]-2-chlory-5-nitrobenzamide, which (at 0.1 µg/mL) in vitro showed 81 and 01 Thhibition of IL-5 and IFN-y formation, resp., by mouse spleen cells.
                              = SO2
= p-C6H4 (SO (-4) G3)
= X
G1
G2
G3
G6
G7
G9
G14
MPL:
NTE:
                                     quinolinyl
NH
                                         disclosure
                                        or salts additional substitution also disclosed
      L5 ANSWER 2 OF 4 MARPAT COPYRIGHT 2005 ACS on STN
                    The title compds. [I, Atl = (un) substituted 2-benzothiazolyl or quinolinyl, X = 0, CO, CHRIO, NR11, S(0)k; Y = NR12SO2, R1 = H, halo, alkyl, etc., R2 = (un) substituted aryl, R3 = halo, alkomy, R10 = H, CN, alkyl; R11 = H, alkyl; R12 = H, alkyl; k = 0-2], useful in the treatment or prevention of a condition or disorder mediated by PPAPs such as diabetes, obesity, hypercholesterolenia, rheumatoid arthritis and atherosclerosis, were prepared Thus, reacting 3,5-dichloro-4-(quinolin-3-ylsulfanyl) aniline (preparation given) with 2-chlorobenzenesulfonyl pride in
                         the presence of pyridine and catalytic amount of DMAP in THF/CH2C12 afforded 78% II which showed IC50 of < 1 \mu M against FPARy ligand binding.
                 G2 G14 G9-502-G21
                                - quinolinyl (SO)
    G21
```

```
L5 ANSWER 2 OF 4 MARPAT COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:
1136:69820 MARPAT
117LE:
Preparation of quinolinyl and benzothiszolyl
PPAR-gamma modulators
Mcgee, Lewrence R.; Houze, Jonathan B.; Rubenstein,
Steven M.; Hagiwara, Atsushi; Furukawa, Noboru;
Shinkai, Hisashi
Tularik Inc., USA; Japan Tobacco, Inc.
FCT Int. Appl., 162 pp.
CODEM: PIXCOZ
DOCUMENT TYPE:
LANGUAGE:
PAMILY ACC. NUM. COUNT:
2 PATENT INFORMATION:
    DOCUMENT TYPE:
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
```

L5 ANSWER 2 OF 4 MARPAT COPYRIGHT 2005 ACS on STN NTE: substitution is restricted

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT REFERENCE COUNT:

L5 ANSVER 3 OF 4 MARPAT COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 135:352829 MARPAT
TITLE: Combination therapeutic compositions containing bearene compounds
bearene compounds
INVENTOR(S): Jaen, Juan C., Chen, Jin-Long
Tularik Inc., USA
SOURCE: PATENT TYPE: LANGUAGE: PATENT INFORMATION: English
FAMILY ACC. NUM. COUNT: 2
FAMILY ACC. NUM. COUNT: 2

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 2001082916 A2 20011108 WO 2001-US14393 20010502

W1 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, BE, DK, CM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, HD, MG, MK, MN, NW, MK, MZ, NO, NZ, PL, PT, RO, KU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, VI, ZA, ZW, AM, AZ, EY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BB, CH, CY, DB, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, EF, BJ, CF, CG, CI, CM, GA, GN, GW, HL, HR, NE, SN, TD, TG

US 2002037928 A1 20020328 US 2001-847887 20010502

US 20021-847887 20010502

GI PATENT NO. KIND DATE APPLICATION NO. DATE

US 2003-456932 20030605 US 2000-201613P 20000503 US 2001-847887 20010502

GI

The present invention provides pharmaceutical compns. and methods for the treatment of diabetes mellitus using combination therapy. The compns. relate to a benzene compound and an antidiabetic agent such as sulfonylureas, biguanides, glitazones, a-glucosidase inhibitors, potassium channel antagonists, aldose reductase inhibitors, glucagon antagonists, activators of RNR, insulin therapy or other anti-obesity agent. The methods include the administration of the combination of benzene compound with antidiabetic agent where the two components are delivered in a simultaneous manner, where the benzene compound is administered first, followed by the antidiabetic agent, as well as wherein the antidiabetic agent is delivered first followed by the benzene compound For example, the benzene compound (1) was synthesized using a 5-amino-2-(3-chloro-5-pyridyloxy)benzonitrile (0.457 g) in methylene chloride to which was added 2,4-dichlorobenzenesulfonyl chloride (0.456 AB

LS ANSWER 4 OF 4 MARPAT COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:
1134:71498 MARPAT
Preparation of heterocyclyl substituted
benzenesulfonamides and pyridinesulfonamides for the
modulation of PPARy activity
MCGee, Lawrence R.; Houze, Jonathan B.; Rubenstein,
Steven M.; Hagiwara, Atsushi; Furukawa, Noboru;
Shinkai, Hisashi
SOURCE:
Tularik Inc., USA; Japan Tobacco Inc.
PCT Int. Appl., 232 pp.
CODEN: PIXXD2
DOCUMENT TYPE:

DOCUMENT TYPE:

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	PAT	ENT :	NO.		KI	ND	DATE			A	PPLI	CATI	ON N	0.	DATE			
									WO 2000-US18178									
															BZ,			CN
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			HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT
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															UG,	US,	UZ,	VN
							ΑZ,											
		RW:													AT,			
															PT,	SE,	BF,	ВJ
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The title compds. (I) Arl = (un)substituted aryl; X = alkylene, O, alkylenoxy, etc.; Y = alkylene, O, CO, etc.; Rl = H, heteroalkyl, aryl, halo, etc.; R2 = (un)substituted aryl; R3 = halo, CN, NOZ, alkoxyl which

L5 ANSWER 3 OF 4 MARPAT COPYRIGHT 2005 ACS on STN (Continued) g), followed by pyridine (150 µL). The reaction progress was monitored by TLC, and upon completion the solvent was removed under vacuum. The resulting residue was partitioned between methylene chloride and water. The org. layer was drawn off and concd. The residue was triturated with ether to provide 0.447 g of I as a white solid, m.p. 154-156\*.

G1<del>---G2--</del>G8---G22

- quinolinyl - 0 - NH - p-C6H4 (SR (1-2) G29) - S - CF3 - C1 - Ph (SQ (1-3) G27)

G1 G2 G7 G8 G23 G27 G29 G32 MPL: NTE:

- S - CF3 - C1 - Ph (SO (1-3) G27) claim 1

claim 1 or pharmaceutically acceptable salts

ANSWER 4 OF 4 MARPAT COPYRIGHT 2005 ACS on STN (Continued) are modulators of PPARy activity and therefore are useful for the treatment of conditions such as type II diabetes and obesity, were prepd. E.g., a multi-step synthesis of the benzenesulfonamide II which showed IC50 of < 1 µM against PPARy binding, was given.

Cl CF3 claim

substitution is restricted

THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT. REFERENCE COUNT:

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10/719,997
=> d his
     (FILE 'HOME' ENTERED AT 09:28:45 ON 06 JUN 2005)
     FILE 'REGISTRY' ENTERED AT 09:28:49 ON 06 JUN 2005
L1
                STRUCTURE UPLOADED
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     FILE 'CA' ENTERED AT 09:29:16 ON 06 JUN 2005
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              4 S L3
     FILE 'MARPAT' ENTERED AT 09:29:29 ON 06 JUN 2005
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              4 S L1 FULL
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---Logging off of STN---
Executing the logoff script...
=> LOG Y
STN INTERNATIONAL LOGOFF AT 09:30:11 ON 06 JUN 2005
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